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**Notice of Allowability**

Application No.

09/857,206

Applicant(s)

LEE ET AL.

Examiner

Michael J. Moore, Jr.

Art Unit

2616

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 11/2/06.
2. ☒ The allowed claim(s) is/are 1,2,4,5 and 8 (renumbered 1-5, respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 5, on line 2, in the equation  $P_{ADJ} = TPC \times W \times N \times \ddot{y}P$ , replace " $\ddot{y}P$ " with  $--\Delta P--$ .

In claim 5, on line 3, replace " $\ddot{y}P_{max}/\ddot{y}P$ " with  $--\Delta P_{max}/\Delta P--$ .

In claim 5, on line 4, replace " $\ddot{y}P$ " with  $--\Delta P--$ .

In claim 5, on line 5, replace " $\ddot{y}P_{max}$ " with  $--\Delta P_{max}--$ .

### ***Allowable Subject Matter***

2. Claims 1, 2, 4, 5, and 8 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, *Takano* teaches transmit power controller 190a of Figure 10 spoken of on column 13, line 24 – column 14, line 3.

*Takano* also teaches transmit power controller 190a (channel estimator) of Figure 10 that receives a plurality of TPC bits (power magnitude information detected from received downlink signals) from base station 101 as spoken of on column 13, lines 46-50.

*Takano* also teaches speed detector 192 (speed estimator) of Figure 10 that detects mobile unit speed as spoken of on column 13, lines 12-16 as well as on column 13, lines 33-37.

*Takano* also teaches step selector 116 (step adjuster) of Figure 10 that selects an optimal step size based upon the detected speed as spoken of on column 13, lines 33-37.

*Takano* also teaches accumulator 114 (demodulator) of Figure 10 that stores TPC bits (power control command) received from base station 101 as spoken of on column 13, lines 46-50.

*Takano* also teaches transmit power controller 190a (power level controller) of Figure 10 that uses speed detector 192 as well as step selector 116 to adjust transmitting power level as spoken of on column 13, lines 28-58.

*Takano* as well as the other prior art of record fail to teach a measuring means (TPC verifier of Figure 3) that measures a reliability of the extracted power control command (TPC bit), where the power level controller derives a weighting factor from the measured reliability, multiplies the changed power control step size by the derived weighting factor, and then increments or decrements the power level of transmitting signals by the multiplied step size.

Regarding claims **2, 4, and 5**, these claims are further limiting to claim **1** and are thus also allowable over the prior art of record.

Regarding claim 8, *Takano* teaches transmit power controller 190a of Figure 10 that receives a plurality of TPC bits (power control command from received downlink signals) from base station 101 as spoken of on column 13, lines 46-50.

*Takano* as well as the other prior art of record fail to teach calculating a reliability of the extracted power control command (value of TPC bit), deriving a weighting factor from the calculated reliability, multiplying a determined power control step size by the derived weighting factor, and then increasing or decreasing power level of transmitting signals by the multiplied power control step size according to the extracted power control command (value of TPC bit).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (8:00am - 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J. Moore, Jr.  
Examiner  
Art Unit 2616

mjm MM

*Seema S. Rao*  
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